References

1. Day, F. (1889): Fauna of British India: Fishes, I.
2. Weber, M. & de Beaufort, L. F. (1913): Fishes of Indo-Australian Archipelago, II.
3. Herre, A. W. (1936): *Public. Field Mus. Nat. Hist. Zool.* **11**: 353.
4. — — — (1939): *Rec. Ind. Mus.*, **41**: 330.
5. — — — (1940): ibid., **42**: 1.
6. — — — (1940): ibid., **42**: 10.
7. — — — (1941): *Mem. Ind. Mus.*, **13**: 335
8. Fowler, H. W. (1942): *Bull. U.S. Nat. Mus.*, **13**: 698.
9. Misra, K. S (1947): *Rec. Ind. Mus.*, **45**: 402
10. Devanesan, D. W., & Varadarajan, S. (1942): *Proc. 29th Ind. Sci. Cong.*, **3**: 157.

15. RARE OCEAN SUN-FISH—*MASTURUS LANCEOLATUS* LIENARD IN BOMBAY WATERS[1]

(*With a photo*)

The sight of an unusual fish among the catch landed at one of Bombay's fishing docks, on January 4th, 1953, caused some excitement among the fishermen there. The specimen was taken by the fishermen to Rev. Brother Navarro of the St. Xavier's High School, who, in turn, invited me to examine it.[2]

The specimen was identified to be a Pointed-tailed Ocean Sun-fish, *Masturus lanceolatus* Lienard of the family Molidae. The fish was a juvenile specimen of the species weighing about 20 lb. and measuring 37 inches in total length. Fish of this type are rarely met with in our waters, and the captured specimen has been mounted and exhibited in the school museum.

Ocean Sun-fishes or Head-fishes, as they are sometimes called, are known for their grotesque rounded bodies and gigantic size, drifting listlessly on the surface of oceans. They represent the family Molidae in which only three genera are included. *Mola mola* one of the commonest member of the family, attains a weight of 1,200 lb. and a length of 8 ft. (Jordan, 1905; p. 425). *Masturus lanceolatus* Lienard is known to attain a length of 10 ft. (Fraser-Brunner, 1951). *Ranzania laevis* Nardo, which represents the third genus also grows to a large size.

Being oceanic in habit, Sun-fishes are not commonly encountered near the continental shelf, the few specimens that are landed having drifted into inshore waters by sheer accident. Whitley (1934) recorded only a few specimens of *Ranzania laevis* Nardo from Australian waters and Deraniyagala (1944) recorded five specimens from Ceylon. According to the latter author, the Ceylonese specimens belong to the genera *Mola* Cuvier and *Ranzania* Nardo. No specimen of *Masturus*, the third genus of the family Molidae, has so far been

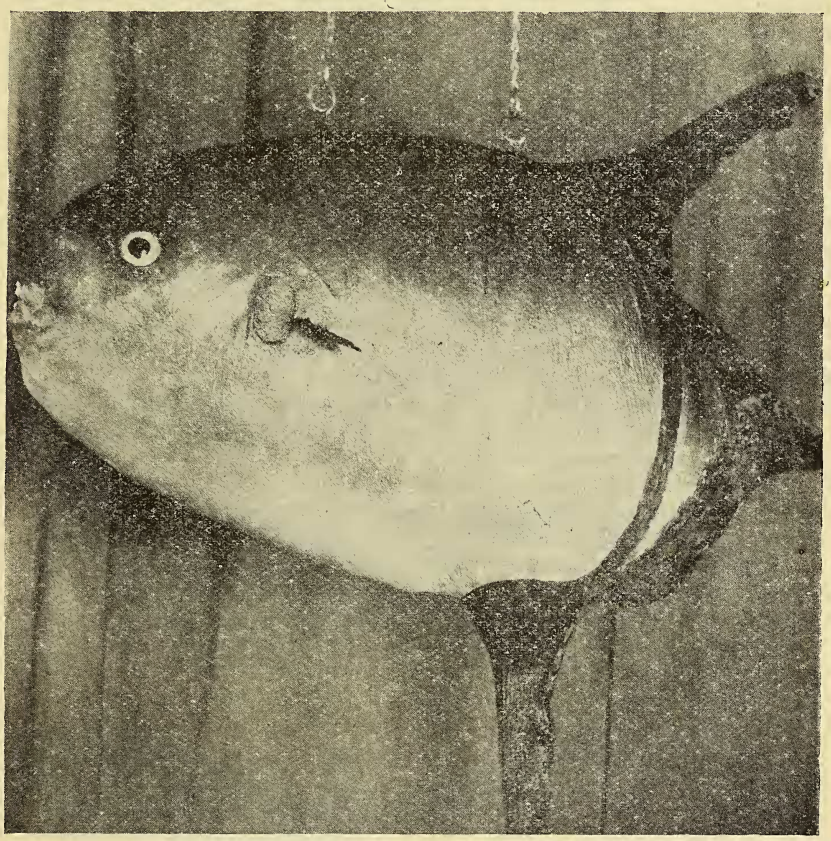
---

[1] Published with the kind permission of the Director of Fisheries, Bombay.

[2] I am grateful to Brother Navarro for inviting my attention to this unique find and giving me facilities for identification and description.

recorded from these countries. Neither has any representative of the whole family been recorded from Indian (Bharat) waters.

Occurrence of a small Sun-fish was recorded by Day (1888, p. 809) but its identity could not be established as he did not have an opportunity to examine the fish. He stated, 'The Colombo Museum sustained a great loss during my absence last year; a small Sun-fish, *Orthagoriscus* was brought for sale, but was unfortunately rejected'. In the Fauna of British India (Fishes) Vol. II (Day 1889; p. 499), genus *Orthagoriscus* has been recorded but no description of the species is available. Deraniyagala (op. cit.) also has not confirmed the identity of the first Ceylon species.



Juvenile specimen of *Masturus lanceolatus* Lienard

Dr. Hora, Director, Zoological Survey of India, in a letter to me, stated that there was no published record of any species of Sun-fish from Indian waters. Dr. Misra (quoted by Hora), however, stated that a specimen of *Mola mola* was landed by Japanese divers at Nicobar Island in 1929-30, but unfortunately the specimen was not preserved for lack of a preservative. The present find is, thus,

the first record of any member of the Molidae family from Indian waters. A short description of the specimen is furnished below:—

Masturus lanceolatus Lienard

D. 19; A. 16; P. 11; C. 24

The fish is laterally compressed but in profile it is almost orbicular in shape, with an asymmetrical, pointed tail which is the characteristic of the genus. The lines of dorsal and ventral profiles are evenly arched, the snout is rounded; even the jaws being flush with the general rounded profile of the body. The distance from the tip of the upper jaw to the orbit is 80 mm. The teeth in each jaw are fused into a single element. The gills open on either side of the body into vertical slits at the base of the pectorals which are situated fairly high up on the body. The eyes are large and oblong, the longitudinal diameter of the orbit being 38 mm., while the vertical diameter is 35 mm. The height of the body is 475 mm. and standard length is 762 mm., the total length being 925 mm. There are no scales or spines on the body, the dermal covering being granular or leathery in texture.

The finfolds of dorsal, anal and caudal fins are continuous but the finrays of each fin can be determined by careful observation. The extremity of the caudal fin is not 'thumb-like' as stated by Gudger (1937, p. 3), but gradually tapers as depicted by the same author (p. 39), in the case of Kluzinger's dried stuffed 65-inch specimen from the Red Sea. The central caudal lobe is, however, somewhat asymmetrical, being slightly above the central axis; there being 10 fin-rays below the axis of the extremity and 6 above it. The central lobe of the caudal consists of 8 fin-rays which are separated in the middle by a longitudinally running band of brownish-red, smooth skin tissue terminating distally. The tips of the dorsal and anal fins diverge dorsally and ventrally and are 990 mm. apart in the present specimen. The pelvic fins are absent. The pectorals are comparatively small in size.

The colour of the fish is dark grey on the back, becoming gradually silvery-white on the abdomen. The fins are dark grey. At the base of the fins also there is a band of brownish red smooth skin, which is different from the general granular texture of the dermis of the body. It is seen as a wide dark patch at the base of the dorsal and anal fins and as a circular band at the base of the caudal.

Taraporevala Marine Biological Station, Bombay 2. C. V. KULKARNI

References

Day, F. (1888): Fishes of India, London; p. 809.

— — — (1889): Fauna of British India—Fishes. Vol. II; p. 499.

Deraniyagala, P. E. P. (1944): Some Whale Sharks and Sun-fishes captured off Ceylon. *Journ. Bomb. Nat. Hist. Soc.*, **xliv** (3): 426-430.

Fraser-Brunner, A. (1951): The Ocean Sun-fishes (Family Molidae). *Bull. Brit. Mus. (Nat. Hist.) Zool.*, Vol. **1** (6): 89-121.

Gudger, E. W. (1937): The structure and development of the Pointed-tailed Ocean Sun-fish *Masturus lanceolatus*. *Ann. Mag. Nat. Hist.*, **xix**, 10th, pp. 1-95.

Jordan, D. S. (1905): A guide to the study of fishes, New York.

Whitley, G. P. (1933): Studies in Ichthyology. No. 7. *Rec. Austral. Mus.*, **xix** (1); 108.